

### Various National and International Provisions Related to Health

- **Article 25 of the United Nations Universal Declaration of Human Rights** states that everyone has the right to a standard of living adequate for the health and well-being of himself and of his family.
- Right to live with human dignity as described in **Article 21 of the Constitution** includes the protection of health.
- Recognizing health and nutrition as the primary requirement of national development, the new **National Health Policy** was approved in March 2017.

### National Health Policy 2017

- Under this policy, the government aims to **provide medical facilities** to 80 per cent of the people in a Government hospital **completely free of cost** which includes medicines, diagnostic tests and treatment.
- However, compliance of this policy **has not been made mandatory for the states**. New Health Policy has been provided to them *as a model and its implementation is left to the discretion of the individual states*.
- The Policy is set to **increase its spending on public health to 2.5 per cent** of GDP in a time-bound manner. As of now, this expenditure is **only 1.15 per cent of GDP**.
- It underlines **increasing life expectancy** from 67.5 years at present to 70 years by 2025. There is a **plan to reduce the total fertility rate** at the national and sub-national levels to 2.1 by 2025.
- The policy also emphasizes on **reduction in the mortality rate** of under-five children to 23 per thousand births by 2025, **reduce infant mortality rate** to 28 by 2019 and **reduction of maternal mortality rates (MMR)** to 100 by 2020.
- A target has been set to **reduce the number of blindness** cases to 0.25/1000 by the year 2025.
- Emphasis has been laid on relative **reduction in prevalence of current tobacco use** by 15 per cent by 2020 and 30 per cent by 2025.

### Steps Taken

- To achieve **Universal health coverage**, two major schemes in the medical sector have been initiated through the health sectors ambitious scheme – **“Ayushman Bharat”**.
- One of these schemes is related to the **opening of health and welfare centres**, the other is about the **National Health Protection Mission (NHPM)**.
- Under “Ayushman Bharat” scheme, more than 21 thousand health and Welfare Centres have started functioning.
- **“Pradhan Mantri Swasthya Suraksha Yojna”** is being implemented with the objective of removing imbalance in the availability of reliable and affordable health care facilities in different parts of the country. Under this, focus is on the **spread of medical education**, especially in states with no facilities or less facilities of quality medical education.
- So far, under this scheme, **22 new institutes** have been announced that are to be established on the lines of All India Institute of Medical Sciences – AIIMS.
- Under the **second part of the Pradhan Mantri Swasthya Suraksha Yojna**, the existing medical colleges and institutions of the state Government are being upgraded.
- In the **Union Budget 2019-20**, there is a complete focus on the health sector. The budget of Ministry of Health has been **increased by 18.67 per cent** for the current financial year.
- The goal of the Government is **to control the increase in incidence of diabetes** cases by the year 2025.

- The Government is running national programmes up to the district level under the **National Health Mission** for the prevention and control of diseases related to cancer, diabetes, heart disease and stroke.
- Under the '**Jan Aushadhi Yojna**', quality generic medicines are being made available at affordable prices to all individuals in collaboration with the state Governments.
- The central Government is also committed to the **eradication of tuberculosis** i.e. TB by the year 2025. To achieve this goal, a national plan has been drafted for the year 2017 to 2025.
- In September 2019, the campaign "**TB Harega, Desh Jeetega**" was launched along with the "**National TB Prevalence Survey**".
- The new tuberculosis control campaign incorporates three strong pillars- **clinical approach, public health component and active community participation**. The Government is committed to ensuring that high quality TB treatment and care facilities **are provided free of cost to all patients** at the desired location.
- The Government of India has also **partnered with the Global Fund** to launch JEET (Joint Effort for Elimination of TB).
- Showing concern towards TB patients, the Government in April 2018 launched the **Nikshay Poshan Yojana**, a Direct Benefit Transfer (DBT) scheme to provide nutritional support to them. Under the scheme, TB patients have been receiving **Rs. 500 Per month for the entire duration of treatment**.
- The **National Medical Commission Act 2019** passed by Parliament is a comprehensive and visionary reform in the medical education sector and will prove to be a milestone in the years to come.

**NFHS Survey and Malnutrition:**

- As per the **fourth National Family Health Survey 2015-16**, 35.7 per cent children below five years were found to be underweight, about 38 per cent stunted and about 21 percent, suffering from high malnutrition, were found to be both underweight as well as stunted.
- About 22.1% of the women were also found to be underweight. Anaemia was found in about 48.4% of the children and 53% of the women.
- On the contrary, the problem of **overweight or obesity in children, adolescents and adults is also increasing rapidly**.

- Effort being made to reduce the mortality rate of unborn and newborns through the **India Newborn Action Plan (INAP)**.
- Under **Mission Indradhanush**, children up to the age of 2 years have been brought under immunization programme to protect against 7 types of diseases: *diphtheria, whooping cough, tetanus, tuberculosis, polio, hepatitis-B and measles*. Pregnant women are also vaccinated against tetanus.
- **Revolving Funds** up to Rs. 50 lakh have been set up in 13 Central Government Hospitals/Institutes for the treatment of patients below poverty line **under the Rashtriya Arogya Nidhi (RAN)**.
- Several important steps have been taken under the "**National Nutrition Policy**" to address the problem of malnutrition.
- **Rashtriya Poshan Abhiyaan** (National Nutrition Mission) was launched in march 2018 to improve nutritional status, check prevalence of anaemia among children, adolescent girls, women (especially pregnant women), reduction in low birth weight babies and stunting growth in children up to 6 years by 2020.
- Beti Bachao, Beti Padhao, Mid-Day Meals Scheme, Janani Shishu Suraksha Karyakaram, Rashtriya Bal Swasthaya Karyakram (National Child Health Program), Balika Samridhi Yojna and 26 weeks maternity leave scheme for pregnant women are contributing significantly in addressing problems associated with health and nutrition.

- Under the **Pradhan Mantri Matru Vandana Yojana** based on Direct Benefit Transfer, cash benefits are provided to pregnant women directly in their bank accounts. The scheme aims to meet enhanced nutritional needs and partially compensate for wage loss during pregnancy.
- The eligible beneficiaries also receive **cash incentive under Janani Suraksha Yojna (JSY)**.

## Conclusion

It is very important to overcome the challenges of health and nutrition in order to transform the vision and resolve of a 'clean India – health India', malnutrition free India' and a 'New India' in to a reality.

## Health and Nutrition Overview and The Way Forward

### Need for Good Nutritional Status

- Good nutritional status ensure that individual can fight disease – causing agents, stays healthy, be productive to the society and contribute to overall development.
- Under – nutrition in children, especially in fetus during pregnancy and up to 2 years of age, can **take away up to 15 IQ points**.
- A study by the World Bank has estimated that **annual cost of malnutrition in India** is at least US\$ 10 billion and is driven by loss of productivity, illness and premature deaths.

### Multi-Layered Nutritional Challenge

- It is not the under-nutrition only, the **over-nutrition** (obesity), '**protein hunger**' and '**hidden hunger**' (or micronutrient deficiencies) in otherwise normal weight persons are the other dimensions.
- The terminology of malnutrition is commonly used to capture the under and over nutrition and the related challenges.
- In many setting and countries, both under and over-nutrition are increasing as an emerging challenge, described as '**Double Burden of Malnutrition**' (DBM).

<p>There is <b>high level of protein deficiency</b>. Though the country produces large quantity of pulses, per capita protein availability in India has been falling in last 3 decades from 65 grams in 1985 to 55 grams in 2005 and <b>50 grams in 2015</b>. Clearly, the solution to under-nutrition is much beyond simple increased production and availability of food grains.</p>
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### Initiatives To Improve Nutritional Status

- The Gol had launched **National Nutrition Strategy** in Aug 2017 and then **National Nutrition Mission (NNM)** in March 2018.
- NNM aimed at **2-3 per cent annual reduction** in the rate of low birth-weight, stunting, undernourishment and anaemia amongst women.
- NNM is now being implemented as **POSHAN Abhiyaan**, under Ministry of women and Child Development, aiming for **Kuposhan Mukh Bharat (Malnutrition free India) by year 2022**.
- As part of this POSHAN Abhiyaan, **nutrition is proposed to be a Jan Aandolan** or mass movement and the **month of September has been designated as POSHAN Maah**.
- In addition, **Pradhan Mantri Matru Vandana Yojana** (also known as Maternity Benefit Scheme) was announced in late 2016 and launched in 2017.
- There are a number of complimentary initiatives under different ministries to focus on improved nutritional status through approaches such as **Eat Healthy and Fit India initiative**.
- The **Aspirational District programme** also has nutritional status as a performance indicator.

## Way Forward

- Integrated health and nutrition initiatives with closer collaboration of health, women and child development and education departments.
- **Diversification of supply of food** under different schemes including more nutritious items such as millets, eggs, milk, soybean and nutrient rich fresh foods. **Mass fortification** of rice, wheat, edible oils and salts, with essential minerals and vitamins should be optimally used.
- There is need to **increase protein and micronutrient** content in mid-day meals and ICDS food.
- Regular **monitoring on real time basis** and reporting system with **data flow in two directions is needed**. This is possible with use of **digital technology**.
- Promote '**Nutrition Garden**' concept: Ministry of Human Resource Development has brought the concept of school 'nutrition garden' encouraging eco-club of students to help them identify fruits and vegetables best suited for topography, soil and climate. This clearly has the potential to improve nutritional status of population.
- Focus on '**behavioral change**' for improved nutrition.
- Attention on '**dietary diversification**' and focus on healthy diet - With diet diversification in the spotlight, ***My plate for the day***' publication of The National Institute of Nutrition (NIN), India has highlighted that the fruits and vegetables should *share nearly 50 per cent of an individual's food plate*.
- Establish **more cold chain storage** capacity for food items across the country. It will contribute to less wastage and improved availability and thus improved nutrition for Indian population.
- Promote **local production of fruits and vegetable** in rural India as, contrary to common belief, the **cost of fruits and vegetables in rural areas is higher** than urban as the transportation cost is also factored in.
- **Educate people on health benefits** of consumption of fruits and vegetables along with training on community or kitchen gardening or terrace gardening.
- **Link the overall nutrition and healthier lifestyle**: The **school could be suitable platforms** to call parents of children and educate them about healthy nutrition and life style.
- **Engage elected representatives and civil society** members in making healthy India.

## Conclusion

- The period of 2016-25 is United Nations (UN) decade of nutrition, and only six years are left. The target for sustainable development goals is 2030, which has nearly a decade to achieve. Only three years are left to achieve the target set up under National Nutrition Mission (NNM).
- Clearly, **there has to be an urgency to accelerate interventions**.
- It is time to consider new approaches to **reduce under – nutrition and obesity** at same time.
- It would also require stronger collaboration and coordination between multiple departments, improved data collection and analysis for action and sustaining the political commitment and public attention on tackling nutrition challenges in India.

## Healthy System: Towards A New India

- India has made noteworthy strides on health and nutrition over the last two decades. Polio, guinea worm disease, yaws as well as maternal and neonatal tetanus have been eliminated.
- The **total fertility rate has reduced** sharply 202 in 2018-16.
- We were able to **achieve the Millenium Development Goals** in respect of the **Maternal Mortality Ratio** (MMR level of 130 against a target of 139) as well the **Under-5 child mortality target** (U5 MR level of 43 against a target of 42).

- **Infant Mortality Rate** has also reduced to 41 per 1000 live birth in 2015-2016 (NFHS-4).

### **Health System: Still Facing Challenges**

- There are significant **inter and intra-state disparities** in outcomes and socio-economically disadvantaged groups are especially **vulnerable to gaps in healthcare access**.
- While the **burden of non-communicable diseases** is rising, there is also a substantial unfinished agenda with respect to **communicable diseases** as well as maternal and child health.
- The **health system is fragmented** at multiple levels: payers and modes of financing, providers of healthcare services and the digital backbone.
- Currently the government (Union and States combined) spends approximately 1.13 per cent of GDP on health. As a consequence, **households finance 65 per cent** of the healthcare spending through **out-of-pocket expenditure** at the point of care.
- Delivery of health services is also fragmented into small sub-scale entities, adversely affecting the quality and efficiency of service delivery.
- The digital systems used in these health care entities, are also **siloed in the absence of mandatory adherence to any data standard**. This limits the availability of information that could potentially guide policy making.

### **Public and Primary Health**

- A comprehensive effort is being made for **incorporating traditional medicine within the overall framework** for promoting health and well-being through the **National AYUSH Mission**.
- In 2017, the first-ever **All India Institute of Ayurveda** was launched along the lines of AIIMS, New Delhi, for creating synergies between the traditional wisdom of Ayurveda and modern technologies.
- To build a robust primary healthcare system, the Government has announced the setting up of **health and Wellness Centers (HWCs)** under the Ayushman Bharat initiatives.
- The HWCs will deliver a comprehensive package of diagnostic, curative, rehabilitative and palliative services for communicable as well as non-communicable diseases.
- Moreover, the Centers will provide diagnostics and drugs free cost which will have a direct impact on controlling out-of-pocket expenditures.

### **Secondary and Tertiary Healthcare**

- The second pillar of Ayushman Bharat is the Pradhan Mantri Jan Arogya Yojana (PM-JAY) which will provide 10 crore of the poorest and most vulnerable families in the country an annual cover of Rs. 5 lakh per annum for hospitalization related expenses.
- The Government enacted the landmark National Medical Council Act 2019 for overhauling medical education in India.

### **Medicines and Devices**

- More than 5,500 **Jan Aushadhi stores** have been opened for providing quality drugs at affordable price.
- To make medicines affordable for all citizens, the Government has also **fixed the ceiling prices** of nearly 850 drugs.
- The prices of **drug releasing stents**, which are used for treating blocked arteries, were also lowered from INR 30,180 to INR 27,890.

- India also **finalized its first National Essential Diagnostics List** earlier this year to guide decision making with respect to the different kinds of diagnostic tests required by healthcare facilities across the country.

### **Health Technology and Data System**

- The **Auxiliary Nurse Midwives Online or ANMOL** application has been developed to equip public health workers to register pregnant women, encourage institutional birthing and monitor immunization programmers for newborns.
- In the area of digital health, the **National Health Stack** proposed by NITI Aayog in 2018 is an important step. It is designed to offer a suit of advanced technologies which can be incorporated into overall digital health implementation in India.
- In 2019, the **National Digital Health Blueprint** was released by the government. The key features of the blueprint include a *Federated Architectures, Unique Health ID (UHID), privacy and consent management, national portability and Electronic Health Records (EHRs) among others.*
- A system- wide EHR will enable monitoring of diseases, expenditures and performance to deliver financial and health outcomes.
- For doctors working under considerable time pressure, **Artificial Intelligence (AI)** can prove to be an important supportive tool by collating test reports of patients, studying their medical records and suggesting treatments. **Cancer screening and treatment** is one area where AI provides tremendous scope for targeted large-scale interventions.
- NITI Aayog is in advanced stage of **launching a programme to develop a national repository** of annotated and curated pathology images for cancer screening and treatment.

### **Conclusion**

- In its **Three-year Action Agenda**, NITI Aayog called for a new wave of institution building with a strong and a pro-active stewardship role by the Government to overcome the persistent challenges while also leveraging the potential of a mixed health system.
- The **key enablers of health system reform** such as financing organization and provision of service delivery as well as digital health need to be strengthened as highlighted in the book ***Health System for a New India : Building Blocks*** released by NITI Aayog.

## **Nutrition: A Public Health Priority**

### **What is Nutrition?**

- Nutrition is the intake of food, considered in relation to the body's dietary needs. Good nutrition, an adequate, well balanced diet combined with regular physical activity, is considered to be the cornerstone of good health.

### **Malnutrition:**

- Malnutrition comprises both under-nutrition and over-nutrition and they both lead to their own set of disease conditions.
- In the realm of public health, we consider three terms which are the standards to measure under-nutrition i.e. stunting, wasting and under-weight; while over nutrition is measured by incidence of overweight, obesity, and diet-related Non-Communicable Diseases comprising of heart disease, stroke, diabetes and cancer.

**Nutrition Status**

- Globally, 15.08 crore children under five years are stunted and 5.05 crore are wasted, as stated by the Global Nutrition Report 2018.
- In India, 4.66 crore children are stunted, and 2.55 crore are wasted. Also, India figures among the set of countries that have more than 10 lakh overweight children.

**Initiatives by Government:**

- The Swachh Bharat Abhiyan; The Pradhan Mantri Matru Vandana Yojana; Mission Indradhanush
- **Mothers Absolute Affection (MAA)**, the exclusive breastfeeding initiative, is focused on increasing rates of exclusive breast-feeding to reduce infection among children up to age of 6 months.
- MoHFW also implements the **Intensified Diarrhoea Control Fortnight (ICDF)** programme, **National Deworming Day (NDD) Programme**, and Pradhan Mantri Surakshit Matritva Abhiyan.

**POSHAN Abhiyan:**

- POSHAN Abhiyan targets to **reduce stunting, under-nutrition, anaemia** (among young children, women and adolescent girls) and **low birth weight** by 2%, 2%, 3% and 2% per annum respectively.
- Although the target to reduce stunting is at least 2% per annum, POSHAN Abhiyan would strive to achieve reduction in stunting from 38.4% (NFHS – 4) to 25% by 2022 (“Mission 25” by 2022).
- Community mobilization and bringing about social behavior change on nutrition is one of the biggest strategic components of POSHAN Abhiyan.
- **Themes of POSHAN Maah 2019** (there were five themes) – 1. Hygiene, Sanitation & Safe Drinking Water 2. Anemia Prevention (T3 Camp – Test, Treat, Talk Anemia) 3. Diet Diversity Complementary Food & Feeding 4. Diarrhoea Management (D2 Camp Defeat Diarrhea) 5. 1,000 Days Care
- **The two major ministries** made in charge of POSHAN Abhiyan are the **WCD and MoHFW**.
- As part of POSHAN Abhiyan, MoHFW also started the Anaemia Mukh Bharat (AMB) campaign.

**Anaemia Mukh Bharat**

- Anaemia Mukh Bharat strategy is focused on **benefitting six target beneficiary groups**, through **six interventions** and **six institutional mechanisms** to achieve the envisaged target of anaemia reduction under the POSHAN Abhiyan.

<b>Six Beneficiaries</b>	<b>Six Institutional Mechanisms</b>	<b>Six Interventions</b>
<ul style="list-style-type: none"> <li>• Children 6-59 months</li> <li>• Children 5-10 years</li> <li>• Adolescent 10-19 years</li> <li>• Women in reproductive age group</li> <li>• Pregnant women</li> <li>• Lactating mothers</li> </ul>	<ul style="list-style-type: none"> <li>• Intra-ministerial coordination</li> <li>• National Anemia Mukh Bharat Unit</li> <li>• National Centre of Excellence and Advanced Research on Anemia Control-NCEAR-A</li> <li>• Convergence with other Ministries</li> <li>• Strengthening Supply Chain and logistics</li> <li>• Digital Dashboard</li> </ul>	<ul style="list-style-type: none"> <li>• Prophylactic supplementation IFA</li> <li>• Deworming</li> <li>• Behaviour Change Communication</li> <li>• Test &amp; Treat approach for nutritional anemia</li> <li>• Food fortification</li> <li>• Addressing non-nutritional causes of Anemia</li> </ul>

**Conclusion:**

- While government policies and programmes are converging and taking steps to manage malnutrition, the most important factor affecting positive change will be behavior change of population.
- As the tagline of POSHAN Abhiyan states: **Sahi Poshan Desh Roshan** – a healthy population is the foundation rock of a healthy and productive nation.

**Appropriate Nutrition Need for Women and Children**

- Our nutrient needs are *affected by age, gender, physical activity, body composition, growth rate, physiological stress, pathological conditions and many other factors.*
- The diets of women also need to be nutritionally adequate which further attains a greater significance in view of their reproductive role.
- Since the mother's nutritional status, both prior to and during pregnancy, affects foetal growth and development, it is important for the mother to be nutritionally, physically and emotionally sound.

**Inter-Generational Linkages:**

Small and undernourished baby girls grow up to become small mothers who often deliver low birth weight infants with developmental deficits.

The main cause being mothers' poor nutrition and health status, particularly during pregnancy. The effect of under-nutrition on cell numbers (hyperplasia that takes place early in pregnancy) is permanent while that on the cell size is reversible.

- **Teenage pregnancy** among adolescent girls poses double burden – the nutritional burden of adolescence along with that of the pregnancy.
- **Iron deficiency Anaemia**, which is most widespread among pregnant women and nursing mothers, poses severe consequences such as maternal mortality, pre-term deliveries and infant mortality. Similarly, **follic acid deficiency** is associated with spontaneous abortions and obstetric complications.
- Like pregnant women, adequate nutrition for nursing mothers is also vital. As per the **National Guidelines on Infant and Young Child Feeding** (2006), all infants should be exclusively **breastfed for the first six months of life**; and thereafter, along with complementary feeding, breastfeeding should be continued at least up to two years or beyond. Therefore, these mothers need extra nutrients for adequate breast milk production.
- As early infancy is a delicate period of growth and development, optimal nutrition is crucial during this phase for laying the foundation for lifelong health and wellbeing of the individual.
- During the first 5-6 months after birth, there is a rapid **increase in the number brain cells** (neurons) which continues till the second year of life – though at a slower rate. Thus during this period, any kind of malnutrition can affect his/her brain development leading to mental retardation and poor cognition.
- It is extremely important to inculcate healthy eating habits during childhood itself which can then be sustained during adulthood.
- Adoption of healthy eating habits will help children to follow healthy lifestyle not only during childhood, but lifelong. The dual burden of malnutrition needs to be addressed right during childhood itself.

- Many developing nations including India are presently dealing with **severe health concerns at both ends of the nutrition-spectrum bearing dual burden of malnutrition.**
- Socio-economic/industrial development coupled with lifestyle changes have led to drastic shift in disease pattern from communicable to non-communicable diseases. Disparity in social justice/equity adds to the existing concerns.
- In the current scenario, **a paradigm shift from curative to preventive approach** to disease is a prerequisite at individual as well as mass level.
- Health promotion approach is envisaged to empower the population to take well informed and rational health-related choices. Effective communication strategies for generating awareness and greater community engagement using locally available resources/technology supported with healthy policies is need of the hour.

### **Few Initiatives**

- POSHAN Abhiyan has been launched as a Jan Andolan.
- **Mera Aspatal** (My Hospital) is a Ministry of Health initiative to **receive patient feedback** for the services received at the hospital through user friendly multiple channels such as SMS and web portals. It aims at helping the government to take appropriate decisions for enhancing the quality of healthcare delivery.
- MoHFW has adopted a strategy of **organizing Health Melas** to provide health education and early diagnosis besides providing health care services completely free of cost.
- The **'Eat Right India'** movement incorporates mass media, including social media, as part of its outreach to generate public awareness.

### **Way Forward**

- It is important to use a combination of **evidence-based and behaviourally focused educational strategies** that involve active participation of students, school/college staff and wider community.
- Schools should be permitted to **adapt and prioritize elements of the curriculum** as per the local scenario, availability of the resources as well as population needs.
- According to FAO, by linking the curriculum to local food cultures and biodiversity, the elements of cultural preservation and environment sustainability can be effectively incorporated into a more integrated approach.
- Masses need to be educated to grow, harvest and prepare nutritious seasonal produce in their local settings.
- A positive step that is being taken India is **banning the sale or serving of junk food/sugar-sweetened beverages in school/college cafeterias** and stores in and around school premises to promote healthy food/drinking water.
- All health and nutrition interventions should be designed for long term sustainability.
- There is a dire need for **academicians to prioritise educational interventions** on optimal dietary practices and cost effective policies; monitor and evaluate positive health indicators and policy outcomes.
- Various advocacy groups/NGOs need to join hands with scientists to disseminate best health/nutrition related practices to the masses.

## **Role of Anganwadi Workers And ASHAs In Curbing Malnutrition**

- India persistently faces high levels of maternal and child under-nutrition as well as anaemia characterized by an inter-generational cycle. This is further compounded by multiple deprivations caused by poverty, social exclusion and deeply entrenched gender discrimination.
- Anganwadi workers and the ASHA workers are the grassroots level functionaries under the **umbrella ICDS Scheme and the National Health Mission respectively.**

### **Under Nutrition:**

- Under-nutrition in infants and children is further categorized as **severe Acute Malnutrition (SAM)** and **Moderate Acute Malnutrition (MAM)**.
- **SAM refers** to very low weight for height (< 3z scores of the median), visible severe wasting, or the presence of nutritional odema.
- **MAM is defined** as a weight-for-age between -3 and -2 z-scores below the median. It can be due to low weight for height (wasting) or a low height-for-age (stunting) or to a combination of both.
- As per the recent National Family Health Survey (NFHS-4, 2015-16), 35.7% children (aged <5 years) were reported to be underweight and 38.4% stunted.

### **Role Of Anganwadi Workers:**

- Under the ICDS scheme, Anganwadi Services were launched in 1975. Its objectives are:
  - To improve nutritional and health status of children in the age group 0-6 yrs.
  - To lay the foundation of proper psychological, physical and social development of the child;
  - To reduce the incidence of mortality, morbidity, malnutrition and school dropouts
  - To achieve effective co-ordination of policies and implementation strategies among the various departments for promoting child development;
  - To enhance capability of the mothers to look after the normal health and nutritional needs of their children through proper nutrition and health education.
- Package of services under the ICDS scheme: 1. Supplementary nutrition 2. Pre-school non-formal education 3. Nutrition & health education 4. Immunization 5. Health check-up 6. Referral services

### **Roles and Responsibilities of ASHA Workers**

- **Under the National Health Mission**, ASHAs (Accredited Social Health Activists) – the envisaged community health volunteers – are entitled to task/activity – based incentives.
- Recently, as a routine and recurring incentives **ASHAs will get at least Rs. 2000/- per month** (as against Rs. 1000 earlier) along with the benefits of PM Jeevan Jyoti Beema Yojana and PM Suraksha Bima Yojana.
- Empowered with knowledge/skills and a drug-kit for first-contact healthcare, every ASHA worker is expected to elicit community participation in public health programmes in the village.
- She is the first person to be called for any health-related needs of the deprived sections of population, especially women and children, who find it difficult to access healthcare services.
- Recently, **Home-Based-Care for Young Children (HBYC)** has been initiated to extend community-based care by ASHA workers with particular focus on nutrition counselling, improved child rearing practices and breastfeeding promotions etc.

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## **VAJIRAM & RAVI**

### **Water and Sanitation for Healthy India**

- **Continuous availability of potable water** is one of the important parameters of human index. UN recognized the right of every human being to have access to enough water for personal and domestic use which must be safe, acceptable and affordable.
- Emphasis has also been given to the fact that the **water cost should not exceed 3% of household income**. Moreover, the water source has to be **within 1,000 metres of the home and collection time should not exceed 30 minutes**.
- Water is also the main agenda items of SDG. **SDG 6** specially focuses on this issue: “**Ensure availability and sustainable management water and sanitation for all**”.

#### **Indian Scenario:**

- In India, the provision of clean drinking water has been given priority in the constitution with **Article 47** conferring the duty of providing clean drinking water and improving public health standards to the State.
- India is facing worst ever water crisis, with 600 million people facing acute water shortage according to NITI Aayog Report.
- In India, the **per capita availability of water** in the country as a whole decreased to 1588 m<sup>3</sup>/ year in 2010.

#### **Water, Sanitation and Hygiene**

- The prevalence of stunting in India (38.4%) is among the highest in the world, and diarrhoea is a major killer of children younger than 5 years. The links between lack of water and sanitation access and the development goals are clear, and the solutions to the problem are known and cost effective.
- A 2012 WHO study shows that every \$1 invested in improved sanitation translates into an average global economic return of US \$5.5.
- **Loss of productivity** to water and sanitation related diseases costs many countries up to 5% of GDP.

#### **Government Initiatives:**

- The GoI has created the new **Ministry of Jal Shakti**, in which the erstwhile ministries of Water resources and Drinking Water and Sanitation were merged.
- The newly formed Jal Shakti Ministry has launched the **Jal Shakti Abhiyan** – a campaign for water conservation and water security. Interventions will be in the form of water conservation and rainwater harvesting, renovation of traditional and other water bodies/tanks, reuse, bore well recharge structures, watershed development and intensive afforestation.
- Other initiatives include the Water Framework Law of India 2016, National Rural Drinking Water Program (NRDWP), Accelerated Urban Water Supply Programme, Namami-Gange and National water Policy.
- NITI Aayog in 2018 came out with a baseline index of Indian States' performance on various UN SDGs and the states of Himachal Pradesh, Kerala and Tamil Nadu and UT of Chandigarh and Pondicherry, were among the front runners.
- Central and State govt. are making efforts to increase the coverage of water availability and as on December 2018, **79% of rural habitations have been covered at 40 litres per capita per day (lpcd) but only 47% at 55 lpcd**.

- Till January 2019, 18% of rural households were provided with Piped water Supply housing connections.

### **Need for Better Water Governance**

- **Water management** normally refers to the govt. making decisions to manage water systems. **Water governance** includes both **internal and external processes** through which societies manage their water resources.
- According to UN World Water Report (2006), the ***crisis of water is largely due to the failure of water governance.***
- One of the most successful examples of how water governance leads to sustainable water management is the example of the **Phnom Penh Water Supply Authority (PPWSA)** in Cambodia.
- In the span of just 15 years, an almost bankrupt poor performing water utility was transformed into an efficient profitable taxpaying entity, providing 24 hours of uninterrupted water supply to the residents of the Cambodian capital.

### **Few Success Stories in India:**

- **Rajasthan's Mukhya Mantri Jal Swavlambhan Abhiyan**, launched in 2016, is a multi-stakeholder programme which aims to make villages self-sufficient in water through a participatory water management approach.
- It focuses on converging various schemes to ensure effective implementation of improved water harvesting and conservation initiatives. Use of advanced technologies such as drones to identify water bodies for restoration is one unique feature.
- Gram Sabha in villages are responsible for budgeting water resources, providing greater power to community members in decision-making.
- The **Andhra Pradesh Govt. launched the Neeru-Chettu Programme** as a part of its mission to make Andhra Pradesh a drought-proof state.
- The programme has a strong emphasis on improving irrigation and focuses on ensuring water supply in drought-prone areas and reducing the acute gap through scaled up Adoption of scientific water management practices. Repair, renovation, and maintenance of irrigation assets are key activities and complementing such activities before monsoons is a priority under the programme.

### **Mission Ahead:**

- NITI Aayog has identified **nine key area that require significant improvements**. Among these, source augmentation and restoration of water bodies, source augmentation (groundwater), and policy and governance assumes great significance.
- According to the Central Water Commission, **India needs a maximum of 3000 billion cubic metres of water a year** while it **receives 4000 billion cubic metres of rain**. But our problem is that **we are not managing out water resources well.** We capture only eight per cent of its annual rainfall – among the lowest in the world.
- India has been **also poor in treatment and re-use of household wastewater**. About 80% of the water reaching households in India is drained out as waste flow.
- Israel treats 100% of its used water and recycles 94% of it back to households. More than half of irrigation in Israel is done using reused water.

**Conclusion:**

- We need to remember the **theme of the India Water Week – 2019**, which emphasized the need for water cooperation to cope with challenges of the 21<sup>st</sup> century.
- We need to sensitize the people so that the movement towards water conservation takes place at the grassroots level, starting from primary schools, our office premises and each household.

### Digital Transformation in Healthcare

Digital technologies are playing a pervasive role in transforming the healthcare sector in India. From booking doctor's appointments to accessing medical reports and even getting consultation, everything is possible at the click of a button.

#### **Need For Moving From Physical to Digital**

- While the efforts of deploying technology for rural healthcare have been consistent and widespread, the benefits to the rural masses are concentrated only in small pockets of the country.
- In the **absence of any centralized system**, the service providers have undertaken fresh diagnostic tests that again create isolated medical records which increase the burden on citizen significantly.
- India has just around **one doctor for 11,000 people** – a ratio far below from WHO's standard which recommends one doctor per 1000 patients. Most of the **rural Indians lack access** to basic health care facilities.
- **Lack of infrastructure** makes it extremely difficult to retain doctors in villages, as they fear becoming professionally isolated and outdated.
- Poor villagers in order to get treatment have to travel to specialty hospitals in the city. With govt. hospitals already flooded with local patients, these villagers have to wait for their turn which ultimately **inflates their overall expenses**.
- **Cost of setting and maintaining health care** infrastructure is quite huge in rural setting. In such a situation, introducing "**Digital**" instead of "**Physical**" **Health Centres** could pave the way for quality healthcare at a lower cost.
- The **report of McKinsey Global Institute** has estimated that the *implementation of telemedicine technology could save \$ 4-5 billion every year* and replace half of in-person outpatient consultations in India.

#### **CSCs Enabling Digital Healthcare**

- Telemedicine is the form of primary care, where the patient walking in at a Common Service Centre (CSC) seeks the doctor's advice about non-emergency medical problems which do not require immediate doctor's location visit.
- Villages in less developed states are using telemedicine to get medical consultation from the doctors of big cities through video conferencing.
- With the mandate of the Ministry of Electronics & IT, CSC-SPV is also implementing the **Digi Gaon initiative** in rural and remote villages the country, where citizens can avail various online services such as tele-education, telemedicine, financial services, internet connectivity and others.

### Central and State Level Digital Projects

- A few of the ongoing initiatives in digital health being implemented by the Ministry of Health and Family Welfare (MoHFW) include the following programmes – Reproductive Child Health Crae (RCH), Integrated Disease Surveillance Programme, e-Hospital, e-Shusrut, Electronic Vaccine Intelligence Network (eVIN), National Health Portal, National Identification Number (NIN), Online Registration System, Mera Aspatal (Patient Feedback System) and National Medical College Network.
- Since **health is a state subject**, states are supported under **National Health Mission** for services like telemedicine, teleradiology, teleoncology, teleophthalmology and Hospital Information System.
- The **state of Gujarat has implemented e-Aushidhi** project which is primarily a supply chain management application. The main objective is to ascertain the needs of various district warehouses in such a way that all the required materials/drugs are constantly available.
- **Rajasthan** has initiated **Pregnancy, Child Tracking & Health Services Management System** which is an online software used as an effective planning and management tool.
- **Andhra Pradesh** initiated **Rashtriya Bal Swasthya Karyakram (RBSK)** which was aimed at screening over 27 crore children from 0 to 18 years for the 4Ds – Defects at Birth, Diseases, Deficiencies, and Development Delays including Disabilities.
- **Chhattisgarh Govt. launched Chirayu Programme**. Its aim is to screen children for birth defects and various types of nutritional deficiencies, so that any permanent disability can be cured at an early stage.

### Transforming Rural Healthcare through ASHA:

- It is believed that the biggest transformation in the rural healthcare sector of India triggered **with the inclusion of Accredited Social Health Activists (ASHAs)**.
- Apart from the govt., many private institutions are supporting initiatives like ASHA. Founded in 2012 with generous support from TATA Trusts, the TATA Center has initiated a project that focuses on NCH (Neonatal and Child Health), which is a core function of the ASHA workers.
- The center is developing **a series of smartphone-enabled apps** to empower ASHAs to screen children and infants for multiple conditions, and to collect basic epidemiological health data, such as baby's height and weight.
- Technology has changed the way these ASHA workers perform their duties. They can now digitally track pregnant women and infants' health and schedule home visits. They are given a digital checklist which enables them to analyse health issues.
- However, real transformation would come when these ASHA workers are empowered with better skill sets to handle even complex cases and perform tasks during unavailability of doctors.